AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application:

Claim 1 (previously presented): A refining chamber made essentially of platinum group metal material for glass production, comprising: a chamber in the shape of a tube having a cross section, wherein the cross section of the refining chamber is, in at least one segment, shaped in the form of an ellipse or an oval so that in the operating position the length of a horizontal line that divides the surface of the cross section into a lower and an upper section of the surface, both of which have essentially the same area, is greater than twice the maximum vertical extent of the lower segment of the surface.

Claim 2 (previously presented): The refining chamber according to claim 1, wherein the refining chamber has a wall thickness of approximately 0.5 mm to 3 mm, preferably 0.7 mm to 1.5 mm, and is stiffened by shaping measures, said shaping measures comprising forming of creases, corners, waves, folds, or combinations thereof, at the circumference of the refining chamber.

Claim 3 (currently amended): The refining chamber according to claim 1 ~~any one of the preceding claims~~, wherein the ratio of the length of the horizontal line to the maximum vertical extent of the lower segment of the surface is between 2.5:1 and 5:1.

Claim 4 (currently amended): The chamber according to claim 1 ~~any one of the preceding claims~~, wherein the ratio of the length of the horizontal line to the maximum vertical extent of the lower section is between 3:1 and 4:1.

Claim 5 (currently amended): The refining chamber according to claim 1 ~~any one~~

~~of the preceding claims~~, wherein the refining chamber is essentially manufactured from an ODS material and preferably a FKS 16 Pt alloy.

Claim 6 (currently amended): A process for refining glass in which the molten glass flows through a tubular refining chamber of claim 1, ~~particularly according to any one of the preceding claims,~~ comprising: allowing glass in the molten state at a temperature of 1000 °C to 1700 °C to flow through the refining chamber, wherein the cross section of the refining chamber is, in at least one segment, shaped in the form of an ellipse or an oval so that in the operating position, the length of a horizontal line that divides the surface of the cross section into a lower and an upper section of the surface, both of which have essentially the same area, is greater than twice the maximum vertical extent of the lower segment of the surface and the level of the molten glass is adjusted in such a way that the surface of the glass perpendicular to the direction of flow of the molten glass has a width which is more than twice as great as the maximum vertical extent of the molten glass in the refining chamber.

Claim 7 (currently amended): A process for producing [[a]] the refining chamber ~~according to~~ of claim 1 ~~any one of the preceding claims 1 to 4~~, comprising: inserting a smooth-walled tubular segment into a cylindrical mold having an inside diameter essentially the same as the outside diameter of the tubular segment, and which has radial corrugation-like depressions, closing the two axial ends with a compression tool, filling the space thus formed completely with a hydraulic liquid, and then, by exerting an axial compression through the compression tools, generating an internal hydraulic pressure so that the walls of the tubular segment are corrugated to match the depressions in the mold with simultaneous shortening of the tubular segment.

Claim 8 (currently amended): Use of [[a]] the refining chamber ~~and/or a process~~ of claim 1 ~~according to any one of respective preceding claims~~ for refining glass.

Claim 9 (new): A process for producing the refining chamber of claim 1, wherein the refining chamber is used for refining glass.